

S4 Table. Heart and brain scaling exponent comparison. Comparison of exponent b between log of heart and brain oxygen consumption rates (OCR) with log of whole organismal metabolic rates (RMO₂). P and F values are calculated by testing if the slope of the curve log of tissue OCR:RMO₂ plotted against log body mass is equal to zero.

Hearts vs Whole organism	All five species	<i>Danio rerio</i>	<i>Fundulus heteroclitus</i>	<i>Gambusia holbrooki</i>	<i>Oryzias latipes</i>	<i>Pimephales promelas</i>
<i>P value</i>	0.1424	0.4215	0.7667	0.2155	0.3853	0.0511
<i>F (DFn, DFd)</i>	2.176 (1,141)	0.6577 (1,46)	0.08992 (1,26)	1.6222 (1,23)	0.7779 (1,28)	4.909 (1,10)
Brains vs Whole organism						
<i>P value</i>	<0.0001	<0.0001	<0.0001	0.1502	0.0204	<0.0001
<i>F (DFn, DFd)</i>	47.27 (1,139)	27.07 (1,46)	23.42 (1,26)	2.216 (1,23)	6.048 (1,28)	45.76 (1,8)